

Remarks

Claims 1-5, 7-18 and 20-25 are pending in the application. Claims 6 and 19 have been canceled without prejudice or disclaimer.

Objection to the specification

Withdrawal of the objection to the specification is respectfully requested. A review of the specification has not identified any errors.

Claim rejections

Section 102

Claims 1-5, 8, 9, 14-18 and 23-25 were rejected under 35 USC 102(e) as being anticipated by Kadambi et al. (US 6,934,830) ("Kadambi"). The Applicant respectfully traverses. Kadambi cannot support the asserted rejection for at least the reason that it does not disclose a write-back mechanism or operation as recited in independent claims 1, 4, 15 and 23.

Withdrawal of the asserted rejection is therefore respectfully requested.

Section 103

Claim 21 was rejected under 35 USC 103(a) as being unpatentable over Kadambi. The Applicant respectfully traverses. Claim 21 is allowable over Kadambi for at least the reason that it depends on claim 15, which is allowable over Kadambi as discussed above. Withdrawal of the asserted rejection is therefore respectfully requested.

Claims 6, 7, 10-12, 19, 20 and 22 were rejected under 35 USC 103(a) as being unpatentable over Kadambi in view of Choquette (US 6,088,784). The Applicant respectfully traverses. The claims depend on one of independent claims 1, 4 or 15 and are therefore allowable over Kadambi for at least the reasons discussed above.

The Examiner recognizes that Kadambi does not disclose a write-back mechanism as recited in the independent claims. However, the Examiner contends that Choquette discloses such a feature, specifically in the "global bypass 104."

The Applicant respectfully disagrees. As disclosed in Choquette at col. 1, lines 35-41,

“[a] bypass circuit 104 allows data to bypass the register file 102 so that the data can be used by an execution unit at the next clock cycle. For example, an output data from execution unit 1 can be bypassed back to execution unit 1 through the bypass circuit 104. In other words, an output data of an execution unit can become an input data to an execution unit at the next clock cycle.”

Thus, a bypass circuit merely routes an instruction result around the register file if possible. This is further borne out by the passage of Choquette (col. 3, lines 56-64) cited by the Examiner:

“The global bypass circuit 104 provides a bypass function, which allows data to be distributed to execution units before the data is stored in the register file. The global bypass circuit 104 further controls the access of the register file 102. Upon receipt of data, the global bypass circuit 104 identifies whether the data should be stored in the register file 102 or taken a bypass. Moreover, the global bypass circuit 104 searches and fetches data from the register file 102 upon requests from execution units.”

In view of the above, the bypass circuit never moves data from a register file cache to a register file, as recited in the present claims. At most, the bypass circuit decides whether data generated by an execution unit needs to be stored in the register file or can be routed directly to another execution unit. Accordingly, the claims are allowable of the combination of Kadambi and Choquette. Withdrawal of the asserted rejection is therefore respectfully requested.

Claim 13 was rejected under 35 USC 103(a) as being unpatentable over Kadambi in view of Zaiteva et al. (US 5,781,924) (“Zaiteva”). The Applicant respectfully traverses. Claim 13 depends on claim 4 and is therefore allowable over Kadambi for at least the reasons discussed above. Zaiteva does not cure the deficiencies in Kadambi and consequently claim 13 is further allowable over the combination of Kadambi and Zaiteva. Withdrawal of the asserted rejection is therefore respectfully requested.

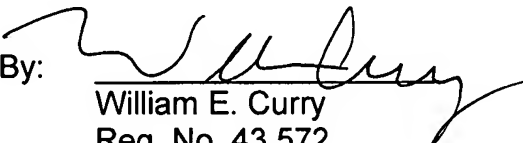
Conclusion

In light of the above discussion, Applicant respectfully submits that the present application is in all aspects in allowable condition, and earnestly solicits favorable reconsideration and early issuance of a Notice of Allowance.

The Examiner is invited to contact the undersigned at (202) 220-4323 to discuss any matter concerning this application. The Office is authorized to charge any fees related to this communication to Deposit Account No. 11-0600.

Respectfully submitted,

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